查询NJU7700供应商

VOLTAGE DETECTOR

■ GENERAL DESCRIPTION

The NJU7700/01 is a low quiescent current voltage detector featuring high precision detection voltage.
The detection voltage is fixed internally with an accuracy of 1.0%.
NJU7700 is Nch. Open Drain and NJU7701 of output form is a C-MOS output.

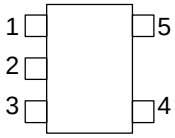
■ PACKAGE OUTLINE

NJU7700/01F

■ FEATURES

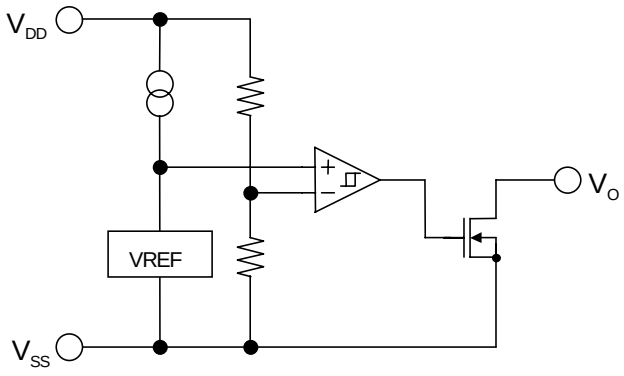
●High Precision Detection Voltage	±1.0%
●Low Quiescent Current	0.8uA typ.
●Detection Voltage Range	1.3~6.0V(0.1V Step)
●Output Circuit Form	NJU7700: Nch. Open Drain type NJU7701: C-MOS Output
●Package Outline	MTP5 (SOT-23-5)

■ PIN CONFIGURATION

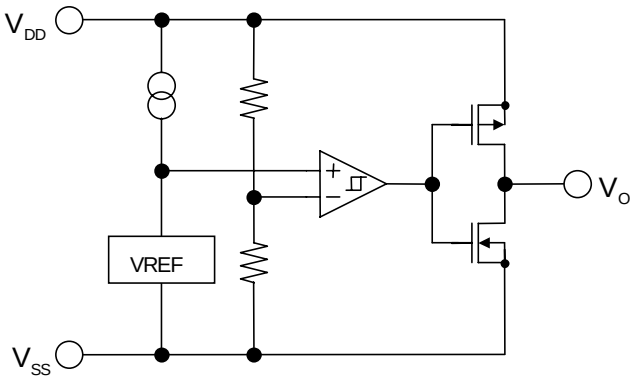


PIN FUNCTION
1.VOUT
2.VDD
3.VSS
4.NC
5.NC

■ EQUIVALENT CIRCUIT



NJU7700



NJU7701

■ DETECTION VOLTAGE RANK LIST

Device Name	V_{DET}	Device Name	V_{DET}
NJU7700/01F13	1.3V	NJU7700/01F28	2.8V
NJU7700/01F21	2.1V	NJU7700/01F42	4.2V
NJU7700/01F22	2.2V	NJU7700/01F43	4.3V
NJU7700/01F23	2.3V	NJU7700/01F45	4.5V
NJU7700/01F27	2.7V	NJU7700/01F06	6.0V

■ NJU7700

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Input Voltage	V_{DD}	+10	V
Output Voltage	V_{OUT}	V_{SS}-0.3~+10	V
Output Current	I_{OUT}	50	mA
Power Dissipation	P_D	200	mW
Operating Temperature	Topr	–40 ~ +85	°C
Storage Temperature	Tstg	–40 ~ +125	°C

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Detection Voltage	V_{DET}			-1.0%	–	+1.0%	V
Hysteresis Voltage	V_{HYS}			V_{DET} ×0.03	V_{DET} ×0.05	V_{DET} ×0.08	V
Quiescent Current	I_{SS}	V_{DD}=V_{DET}+1V	V_{DET}=1.3V~1.7V Version	–	0.5	1.0	uA
			V_{DET}=1.8V~6.0V Version	–	0.8	1.6	
Output Current	I_{OUT}	Nch,V_{DS}=0.5V	V_{DD}=1.2V	0.75	2.0	–	mA
			V_{DD}=2.4V (≥2.7V Version)	4.5	7.0	–	
Output Leak Current	I_{LEAK}	V_{DD}=V_{OUT}=9V		–	–	0.1	uA
Detection Voltage Temperature Coefficient	$\Delta V_{DET}/\Delta Ta$	Ta=0 ~ +85°C		–	±100	–	ppm/°C
Operating Voltage (*note 1)	V_{DD}	R_L=100kΩ		0.8	–	9	V

*note 1 : The minimum Operating Voltage(V_{OPL}) indicates the same value of the output voltage(V_{OUT}) on condition that V_{OUT} becomes 10% or less of the input voltage(V_{DD}).

■ NJU7701

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Input Voltage	V_{DD}	+10	V
Output Voltage	V_{OUT}	V_{SS}-0.3 ~ V_{DD}+0.3	V
Output Current	I_{OUT}	50	mA
Power Dissipation	P_D	200	mW
Operating Temperature	Topr	–40 ~ +85	°C
Storage Temperature	Tstg	–40 ~ +125	°C

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Detection Voltage	V_{DET}			-1.0%	–	+1.0%	V
Hysteresis Voltage	V_{HYS}			V_{DET} ×0.03	V_{DET} ×0.05	V_{DET} ×0.08	V
Quiescent Current	I_{SS}	V_{DD}=V_{DET}+1V	V_{DET}=1.3V~1.7V Version	–	0.5	1.0	uA
			V_{DET}=1.8V~6.0V Version	–	0.8	1.6	
Output Current	I_{OUT}	Nch,V_{DS}=0.5V	V_{DD}=1.2V	0.75	2.0	–	mA
			V_{DD}=2.4V (≥2.7V Version)	4.5	7.0	–	
		Pch,V_{DS}=0.5V	V_{DD}=4.8V (≤3.9V Version)	2.0	3.5	–	
			V_{DD}=6.0V (4.0V~5.6V Version)	2.5	4.0	–	
			V_{DD}=8.4V (≥5.7V Version)	3.0	5.0	–	
Detection Voltage Temperature Coefficient	$\Delta V_{DET}/\Delta Ta$	Ta=0 ~ +85°C		–	±100	–	ppm/°C
Operating Voltage (*note 1)	V_{DD}	R_L=100kΩ		0.8	–	9	V

*note 1 : The minimum Operating Voltage(V_{OPL}) indicates the same value of the output voltage(V_{OUT}) on condition that V_{OUT} becomes 10% or less of the input voltage(V_{DD}).

[CAUTION]
The specifications on this databook are only given for information , without any guarantee as regards either mistakes or omissions. The application circuits in this databook are described only to show representative usages of the product and not intended for the guarantee or permission of any right including the industrial rights.